

Stealing the Sun



By Kelly McGuire and Jeffrey Rosenthal

This brochure presents an overview of the prehistory of the central Sierra Nevada foothills by combining archaeology and traditional Me-wuk stories. The archaeological information presented is based largely on the work conducted at two sites – Black Creek and Skyrocket – located east of Stockton in Calaveras County.

Introduction

Cars and trucks streak by on State Route 4 in Calaveras County, California. Farm equipment sits rusting in a nearby field. An elderly homeowner waters her lawn while children play on an ancient swing. It's hard to imagine that among the roads, houses, and pastures in this unremarkable valley lie the remains of a prehistoric encampment occupied more than 5,000 years ago. But the signs are there—a fragment of a stone bowl mortar; the broken base of a dart point fashioned from obsidian; and a few thin, sharp flakes of green rock—all lying on top of a small knoll adjacent to a slow-moving creek.

This is what archaeologists found in an area known as the Black Creek Site, first documented more than twenty years ago. Much more has been learned because the site has seen extended archaeological excavations over the last several years. Threatened by a highway realignment project, the excavations were conducted to retrieve both artifacts and scientific information from the site deposits before they were lost forever.

The Black Creek Site provides a window into the ancient past and, along with other recent archaeological studies in Calaveras and nearby counties, leads us to a new understanding of when this part of California was first occupied by Native Peoples and how they wrested a living from their surroundings. It is a story of change—changing environments, changing lifeways, and perhaps even changing cultures.

The custodians of this legacy are the Me-wuk, the Native Peoples whose homeland is the foothills and high ranges of the central Sierra Nevada. Although many among the general public today might believe that the Me-wuk are an ancient people who have "passed from the scene," they are, in fact, alive and well, and working to maintain as much as they can of their culture and religious traditions.

In the following presentation, we explore the prehistory of the central Sierra Nevada through the archaeological "dig" at the Black Creek Site. How do archaeologists excavate a prehistoric camp and how do they date the materials they find? What kinds of artifacts and food remains do they unearth, and what do they tell us about the people who lived at the site? While many of us trace our history back only a few short centuries, it should be remembered that Native Peoples lived in California for well over 10,000 years, and their history is rich and compelling. Archaeology unlocks these stories from deep time. Although our texts are the artifacts and features we document, the real story always remains the men and women, grandparents and children, and sisters and brothers who walked these hills before us.



The Dawn of the World

He then called Wek'-wek [Falcon] to come, and told him to pick off the feathers and be careful not to lose a single one. This Falcon did; he picked all the feathers from the three birds and took them all home.

Then he asked his grandfather, "What are we going to do next?"

"Make people," answered O-let'-te. [Coyote-man]

"All right," said Falcon, "do you know how?"

"Yes," answered Coyote-man.

Falcon then told Mol'-luk [Condor] his father that they were going to make people. Condor answered, "All right."

Next morning Coyote-man and Falcon took the feathers and traveled over all the country. They picked out the places where they wanted Indian villages to be, and in each place stuck up three feathers—one for Cha'-kah the Chief, one for Mi'-yum, the head woman or Woman Chief, and one for Soo-la-too the poor. And they gave each place its name—the name it has always had and bears today.

The next morning the three feathers at each place stood up and came to life and became Mew'-ko [Indian People]. This is the way people were made in the beginning and this is the way all the different rancherias or villages were named.

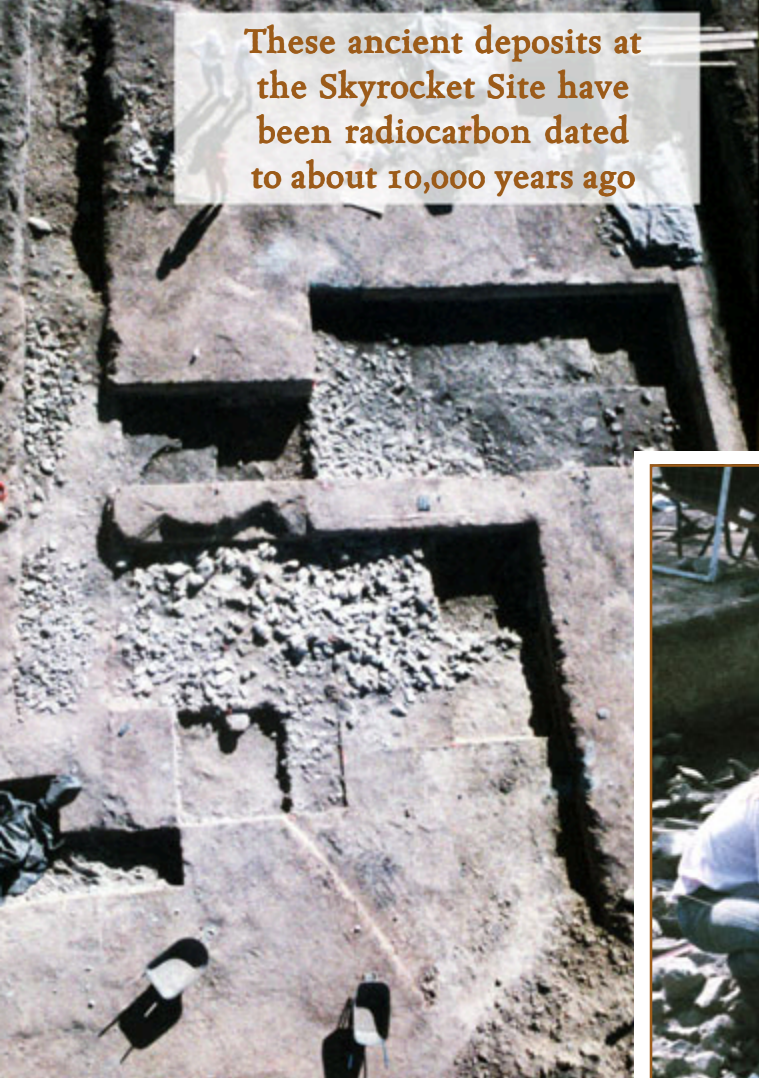
- *A Me-wuk Creation Story* (C. Hart Merriam 1993)

AA Times of Change: Understanding the Past AA

The Earliest People

The story of Coyote-man and Condor, and how they came to make Indian peoples and their villages, is the creation story of the Me-wuk. What does archaeology tell us about the first inhabitants of the Sierra foothills?

The first real evidence of human occupation comes not from a particular village or site, but from a specific type of artifact—the Clovis style projectile point (see page 16). These spear points have a distinctive, flute-shaped channel that extends from base to mid-section. Many archaeologists believe that Clovis points were left by ancient hunting peoples who foraged over vast tracks of land in search of large game. They have been found throughout North America and are dated to a relatively brief time period near the end of the last Ice Age, from 13,500 to 11,500 years ago. In California, Clovis points are most often found along the old shorelines of lakes and marshes, such as Tulare Lake in the San Joaquin Valley. They have also been recovered from both the high Sierra and foothills in Alpine, Amador, and Calaveras counties.



These ancient deposits at the Skyrocket Site have been radiocarbon dated to about 10,000 years ago

Closer to home, one of the oldest and most important prehistoric sites yet identified in California is the Skyrocket Site, located in Salt Springs Valley. Although containing archaeological deposits dating to a number of time periods, what distinguishes the Skyrocket Site is that it possesses buried cultural deposits located as deep as nine feet below the modern ground surface. These ancient deposits have been radiocarbon-dated to about 10,000 years ago. Along with a variety of greenstone tools, including stemmed and leaf-shaped projectile points, these deposits yielded several hundred millingstones and other cobble-based scraping and

pounding tools. The charred remains of important plant foods were found in deposits from the Skyrocket Site, including acorn, grey pine, and wild cucumber. Millingstones make their appearance throughout much of California at this time and continue as an important central technology used by people living in the Sierra foothills until the arrival of Euro-Americans in the 19th century.





The *M*iddle Holocene: Early Global Warming

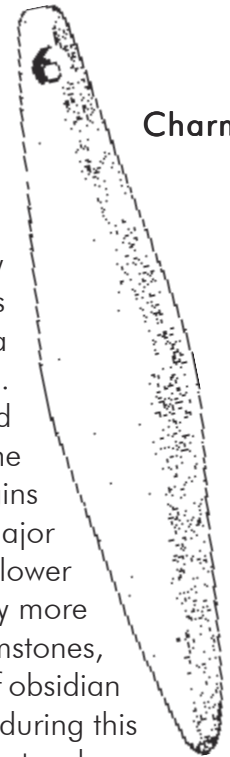
While scientists today ponder the effects of modern industrialization on global climate, it is worth remembering that the world has experienced many previous cycles of warming and cooling. Perhaps the most important for prehistoric peoples living in California was the Middle Holocene warm period. Dated from about 8,000 to 4,500 years ago, this warm and dry interval led to reduced stream flows from the Sierra Nevada, significantly shrinking and, in some cases, actually drying up lakes fed by these streams. Drought-tolerant plant communities, such as chaparral and oak woodland, greatly expanded across California, while alpine tree lines in the Sierra retreated to higher elevations. But perhaps the most dramatic effect for both people and the landscape occurred in the Central Valley. Because of the world-wide rise of sea levels resulting from the melting of ice sheets, sea water intruded farther up the bottomlands of the Sacramento and San Joaquin rivers, creating a vast tidal marsh—and a whole new ecosystem—known today as the Sacramento-San Joaquin Delta. These marshes provided a new and incredibly productive mosaic of resources for Native Peoples, including fish, shellfish, waterfowl, large and small mammals, as well as a variety of marsh-adapted plants.

It is during this time that we see the emergence of village life and distinct cultural traditions. Large cemeteries appear, and individuals are buried with elaborate offerings of marine shell and polished stone. The center of this new cultural pattern was the Delta and the lower reaches of several of the major river drainages flowing west from the Sierra Nevada. Away from these water courses, in the hinterlands of the foothills, life during the Middle Holocene may have been harsher. Rather than living in large villages, Native Peoples who inhabited these areas appear to have been more widely dispersed across the landscape, moving frequently in search of food. The artifacts they left behind are much more simple and utilitarian, lacking the stylistic flourishes of their counterparts from the lowlands. These hinterland peoples may have continued this lifeway well after climatic conditions improved.

The Late Holocene: A "Golden Age"

By about 4,000 years ago, climatic conditions improved to about what we experience today. This cooler and moister climate led to increased river flows and the filling of previously dry lake basins, expansion of alpine forests and wet meadows in the Sierra Nevada, and greater amounts of freshwater in the Delta.

In many ways, the period between 4,000 and 1,000 years ago can be viewed as a "golden age" of California prehistory. Human populations expand dramatically during this time, occupying virtually every habitat in the region. It is at this time that the higher reaches of the Sierra Nevada were occupied on a sustained basis by hunters and small foraging groups in search of food. Major village locations—which are recognized by prominent shell and midden mounds—punctuate the tidal basins of San Francisco Bay and the Delta. The distinct cultural traditions that appeared earlier along the margins of the Delta show greater elaboration and begin to expand up the major river courses draining the west flank of the Sierra Nevada and into the lower foothills. Archaeological assemblages dating to this time contain many more finely made objects, such as abalone pendants, cut-shell beads, charmstones, fish hooks, projectile points, and highly stylized bone tools. The trickle of obsidian coming from source locations in eastern California becomes a flood during this time, signaling the rise of a vast trans-Sierran trade and exchange network.



Charmstone

Abalone Ornament



Archaeological assemblages dating to this time contain many finely made objects, such as abalone pendants, cut-shell beads, charmstones, fish hooks, projectile points, and highly stylized bone tools.

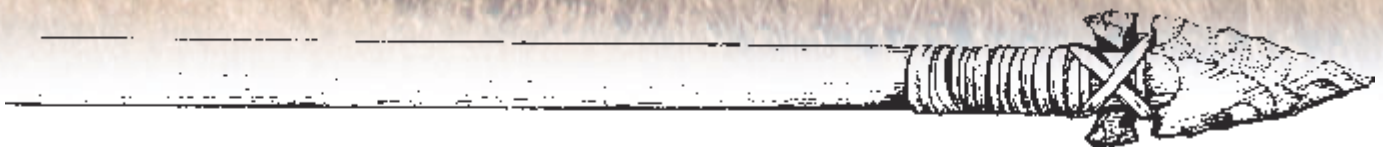
Obsidian Blade

The Recent Past

About one thousand years ago the "good times" came to an abrupt end. Throughout California, many of the villages that had been occupied for centuries were suddenly abandoned, including many of the mound complexes located around the Bay and Delta. In desert areas to the east, rock art traditions that spanned several millennia suddenly came to an end. Obsidian quarry production collapsed, along with trans-Sierran trade networks. And there is increased evidence for conflict and warfare.

Archaeologists are unsure what caused this catastrophe, but many believe that a severe drought may have been the culprit. Some also suggest that growing population, and the inevitable competition for scarce resources, was the cause. Still others point to the introduction of more deadly weaponry, such as the bow and arrow, and believe this resulted in increased conflict and disruption. The truth may well lie with all of these explanations.

But whatever happened, Native lifeways were forever changed. In the foothills, the big villages gave way to smaller settlements more widely dispersed across the countryside. These camps probably included no more than several families, and were frequently moved in response to the seasonal availability of important plant and animal foods. The bedrock mortar made its appearance about this time, probably as a result of this change in settlement organization that now saw families returning year after year to key, but often remote, gathering areas. These descriptions—based on archaeological reconstructions—bear close resemblance to what early ethnographers recorded for the Me-wuk. The Me-wuk believe that these sites, features, and artifacts were left behind by their ancestors.



Hafted Arrow

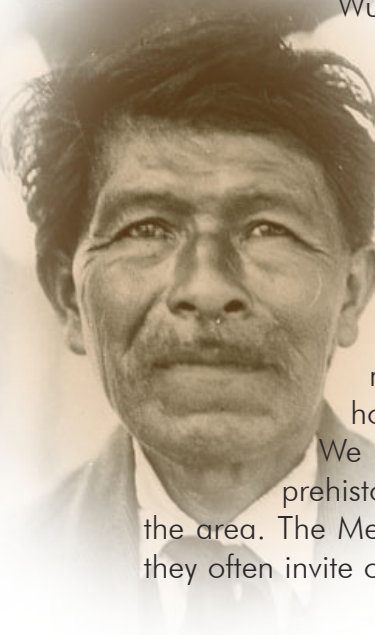


The Me-Wuk

The Me-Wuk people of Calaveras and the surrounding counties will tell you that they have always been in this place. Like most people, their religion speaks of a Creator, and the Me-Wuk (also spelled Mi-wuk and Miwok, depending on the band) believe that their Creator made them on this land. To these people, the terms "prehistory" and "history" hold no great meaning, as they do not divide their existence into these categories.


When non-Native people first entered the region, they found a well-established society of hunters and gatherers whose territory stretched from the edge of the San Joaquin Valley up to the crest of the Sierra Nevada. To their north and south were other bands of Me-wuk; to the east and west were the Washoe and the Northern Valley Yokuts, respectively. This wide topographic and vegetative zone provided the Native People with all manner of foods—grass seeds, wild oats, blackberries, elderberries, wild grapes, acorns, bulbs, greens and roots, mushrooms, hazelnuts, pine nuts, buckeye nuts, fish, deer, rabbits, birds—as well as wild tobacco, medicinal plants, and tule and cedar bark for clothing and houses.

In Calaveras County, the traditional Me-Wuk villages that are known to anthropologists are clustered along the Mokelumne, Calaveras, and Stanislaus river drainages. Today the Calaveras Band is centered in the area around West Point, on the ridge that separates the North and Middle forks of the Mokelumne River. Judging by archaeological studies in the vicinity, the inhabitants of these villages, and their ancient predecessors, had a material culture rich in hunting and butchering tools; milling implements; cooking, eating, and storage vessels; beads and ornaments made of shell, animal bone, and stone; and no doubt a great many items made of basketry, cordage, or wood that have not survived in the archaeological record. Like other northern and central California groups, the Me-Wuk made (and still make) excellent baskets, but as far as we know they did not traditionally make or use pottery. These groups, however, did make vessels from soapstone, and many of these have also been found in archaeological deposits.

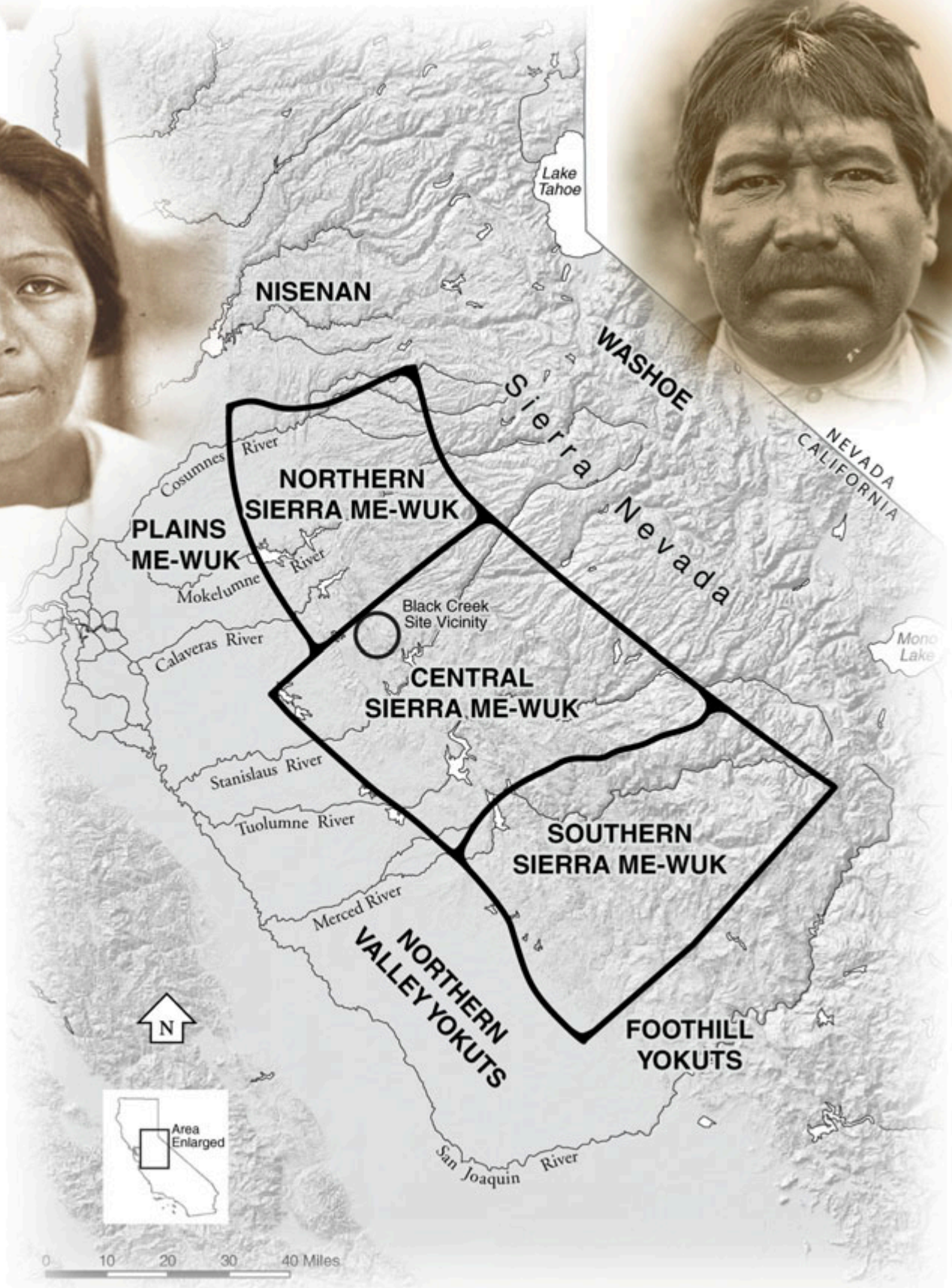


Traditional Me-Wuk houses reportedly were made of thatching, tule matting, or slabs of bark over a conical framework of poles. In fine weather the people cooked and prepared food outdoors; in bad weather they used an interior hearth and oven. Some families also dug storage pits into the floors of their houses. Other important structures were the sweat lodge and the dance house, both of which are still in use today. Sweathouses are used mainly by men for health and purification, while the semi-subterranean dance house is used as an assembly hall and for important ceremonies.

We are not aware of any intact structures from ethnographic or prehistoric times, but there are several reconstructed dance houses in the area. The Me-Wuk people are known for their dance ceremonies, to which they often invite other dancers from neighboring regions.



The photos of Me-Wuk people used on this page and the next were taken by Edward W. Gifford from 1913 to 1922 and are reproduced here with permission from Phoebe Hearst Museum of Anthropology, Berkeley, California. These images, as well as other historical images, are available on the Internet through the Online Archive of California.



Excavations at the Black Creek Site

What is an archaeological excavation—how does one know where to dig; what kinds of tools are used; how are artifacts recovered? In the fall of 2003 archaeologists excavated a large portion of the Black Creek Site; the following is taken from their field journals describing the methods they used to excavate the site.

Initial Controls: Mapping and Surface Collection

The physical relationships between various kinds of artifacts and features recorded during excavation can reveal much about past lifeways. Thus, for example, a cluster of house features in one area of a site, and a concentration of bedrock mortars in another, may tell us how a prehistoric village was organized, and what kinds of activities took place in each area. At a smaller scale, the recovery of charred acorns in association with a millingstone, and with a rock-lined cooking hearth, can tell us much about what foods were eaten and how they were prepared.



To document these relationships, archaeologists keep track of where every feature is located and where every artifact comes from. At the Black Creek Site, this was accomplished by creating a detailed site map overlain with a grid. All artifacts observed on the surface of the site were collected according to where they fell on the grid. Similarly, the locations of all excavation units were plotted on this grid. When the excavation was complete, there remained an all-important record of where every item was found.

Knowing Where to Dig: Backhoe Excavations

Archaeologists are often asked, "How do you know where to dig?" The answer for the field team at the Black Creek Site was simple: by looking underground—not with x-ray vision, but with limited use of mechanical equipment, such as a backhoe. The sidewall trench exposures produced by the backhoe told the archaeologists right away how deep the site was: approximately 80 to 100 centimeters (2.5-3.2 feet). The same exposures revealed a series of three soil layers, or strata, each dating to a specific time interval. By recording the association of artifacts recovered during site excavation with a specific soil stratum, the field team was able to identify groups of particular artifacts—referred to by archaeologists as assemblages—that date to a specific time period. Finally, by observing both the types and amounts of archaeological material within the soil excavated by the backhoe, the field team was able to identify those specific site areas that would produce the most important information during the next phase of fieldwork, the hand-excavation program.



Hand Excavations and Water-Screen Recovery

While backhoe excavations quickly provided the field team with an initial understanding of site structure and a rough road map as to where to dig, only hand excavations allowed for the controlled recovery of artifacts and other archaeological materials. This type of excavation, accomplished with trowels, whisk brooms, and dust pans, results in those perfectly square to rectangular holes that come to mind when we think of archaeology. The meticulous precision and control of hand excavations is all for the purpose of maintaining a record of where every artifact



was found. At the Black Creek Site, each hand unit was excavated in a series of ten-centimeter (four-inch) levels to maintain an exact record of depth—important because we assume that items lying deeper in the ground are often older than those lying above them.



The Black Creek Site posed a particular challenge to the field team—the site deposits consist mostly of very sticky red clay that coats artifacts and makes them difficult to see. To address this problem, the field crew used what is known as water-screen recovery. The deposit from each excavation level was first soaked in a container of water and then screen-rinsed under a high-pressure water jet to remove the clay. The remaining materials were then air-dried, at which point all archaeological materials were retrieved from the screen.

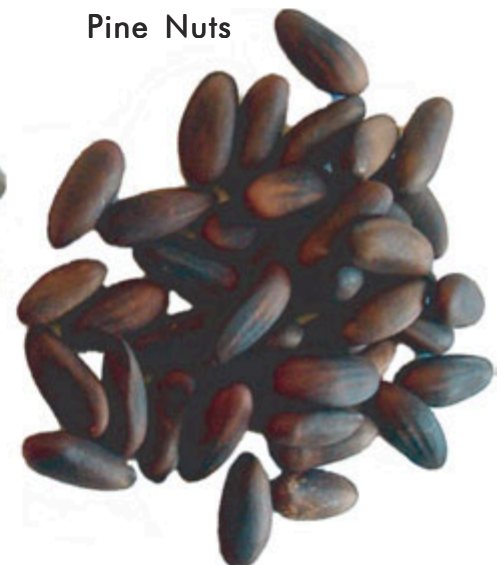
Flotation: A Method for Recovering Plant Remains

Some of the most important archaeological information is in the form of charred seed remains and other small fragments of charcoal. Not only can these items provide important clues about Native plant foods, they can also provide materials suitable for radiocarbon dating (see the following discussion on Radiocarbon Dating). These kinds of charred remains, however, are usually small and extremely fragile, making them difficult to obtain using standard screen-sorting techniques. But because charcoal is extremely lightweight and will actually float in water, archaeologists can take advantage of this characteristic through a process known as flotation.

Soil samples obtained from important site deposits (usually key layers and important archaeological features such as hearths) are carefully submerged and thoroughly mixed into a large container of water. The heavy fraction (sand, dirt, and gravel) sinks to the bottom of the container. The light fraction (charred seeds, charcoal fragments) floats to the top. The light fraction is skimmed off the surface of the water. Back in the laboratory, the resulting flotation sample is scanned for identifiable seed remains. At the Black Creek Site, a variety of seed remains, including acorn and grey pine nuts, were identified from flotation samples.



Acorns



Pine Nuts

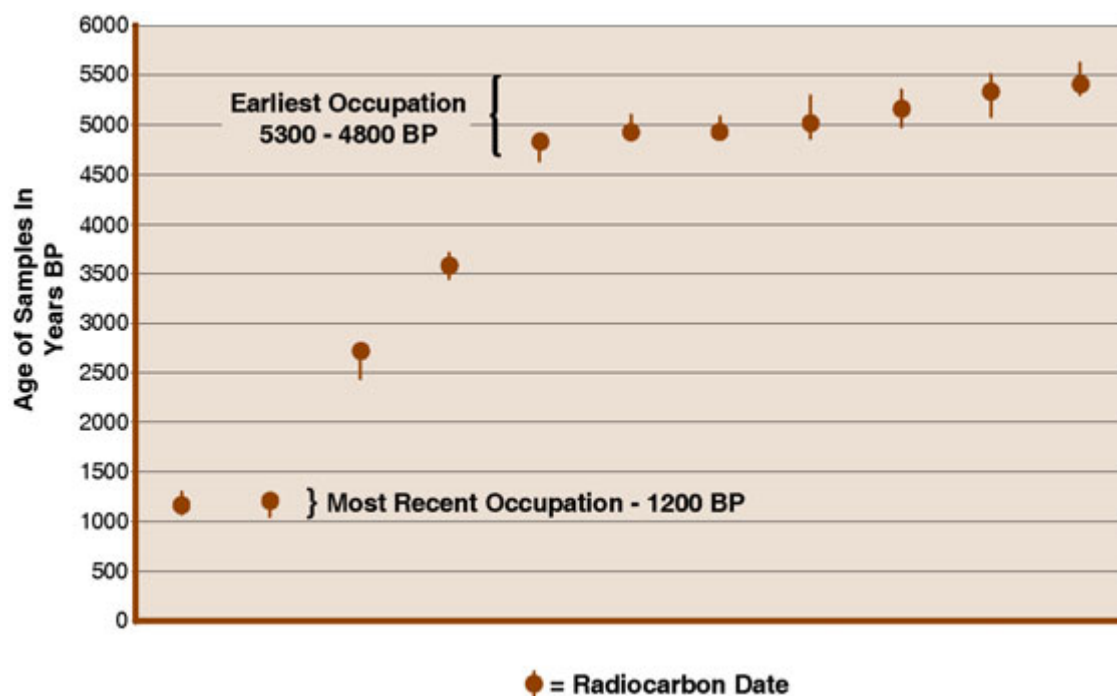
Dating the Black Creek Site

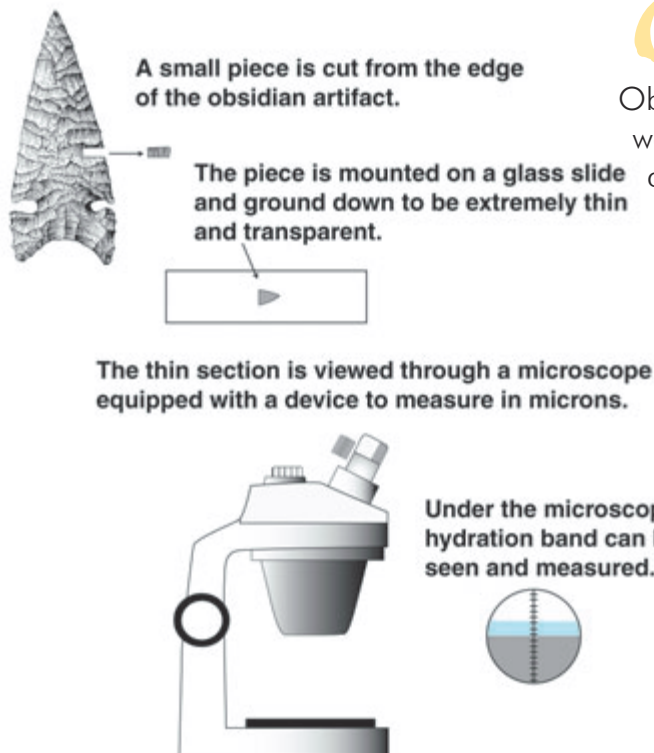
Learning the age of an archaeological site—when and for how long it was occupied—is a critical first step in almost any archaeological study. Three techniques were used to date the Black Creek Site: *radiocarbon dating*, *obsidian hydration analysis*, and *classification of temporally diagnostic artifact styles*.

Radiocarbon Dating

This method is one of the most precise dating techniques available, and is used by archaeologists and other scientists all over the world. It measures the ratio of radioactive Carbon-14 to stable Carbon-12 and -13 in once-living material, to determine how long it has been dead. The method is used to date animal bone, shell, charcoal, and other organic materials found in archaeological sites. A radiocarbon date is usually expressed as a statistical range (e.g., 4530-4165 BP), rather than a single point in time. “BP” is a dating standard that means “Years Before Present,” with “Present” being set at the year 1950.

The radiocarbon dates from the Black Creek Site were obtained from small charcoal samples and are displayed below. As can be seen, these dates tend to group into two time periods: an earlier period between roughly 5,300 and 4,800 BP, and a later timeframe about 1,200 BP. Archaeologists believe that there were two primary occupations of the Black Creek Site, corresponding to these dates. The first, and perhaps most intense, occupation occurred during the “Middle Archaic” Period; the second and more limited occupation took place during the “Late Archaic” Period.





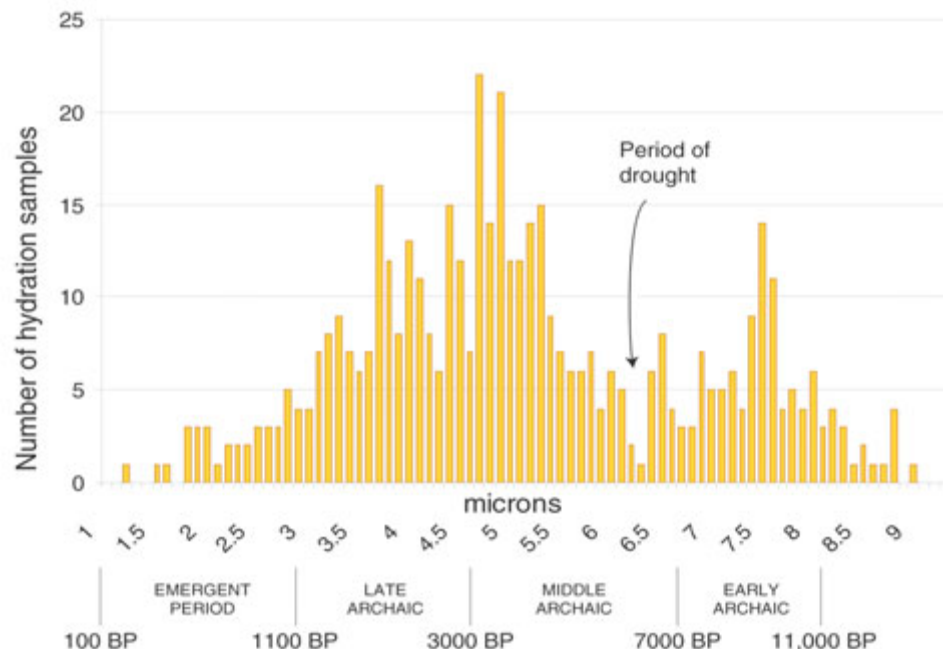
Obsidian Hydration

Obsidian, or volcanic glass, absorbs small amounts of water over time. The longer the time, the more water it absorbs. This water forms a thin surface rind (a hydration rim) which is visible under a microscope. The longer a tool or flake has been exposed to the elements, the thicker will be the hydration rind.

These rims are measured in microns—one micron equals 0.000039 of an inch. At the Black Creek Site, almost 100 obsidian artifacts were subjected to hydration analysis. When these rim values were grouped together, they confirmed the results of the radiocarbon studies—the larger rim values were associated with older site deposits dating to the Middle Archaic period, while specimens with smaller rims were generally found in deposits dating to the more recent Late Archaic period.

Skyrocket Site Obsidian Hydration

A more dramatic use of obsidian hydration is provided by the Skyrocket Site. Below, several hundred obsidian hydration rim values are plotted on a graph. The pattern of peaks and valleys provides archaeologists with clues as to when the site was initially occupied and what were the most intense periods of occupation. As can be seen, there was a peak in activity corresponding to about 7.5 microns, about 8500 BP (before present), followed by a drop in site use dating to around 6100 BP. This drop may reflect the effects of climatic warming and drought identified throughout North America at this time. Site activity picks up again at approximately 3000 BP (5.0 microns), perhaps indicating improved climatic conditions and the rise of obsidian trade and exchange networks.



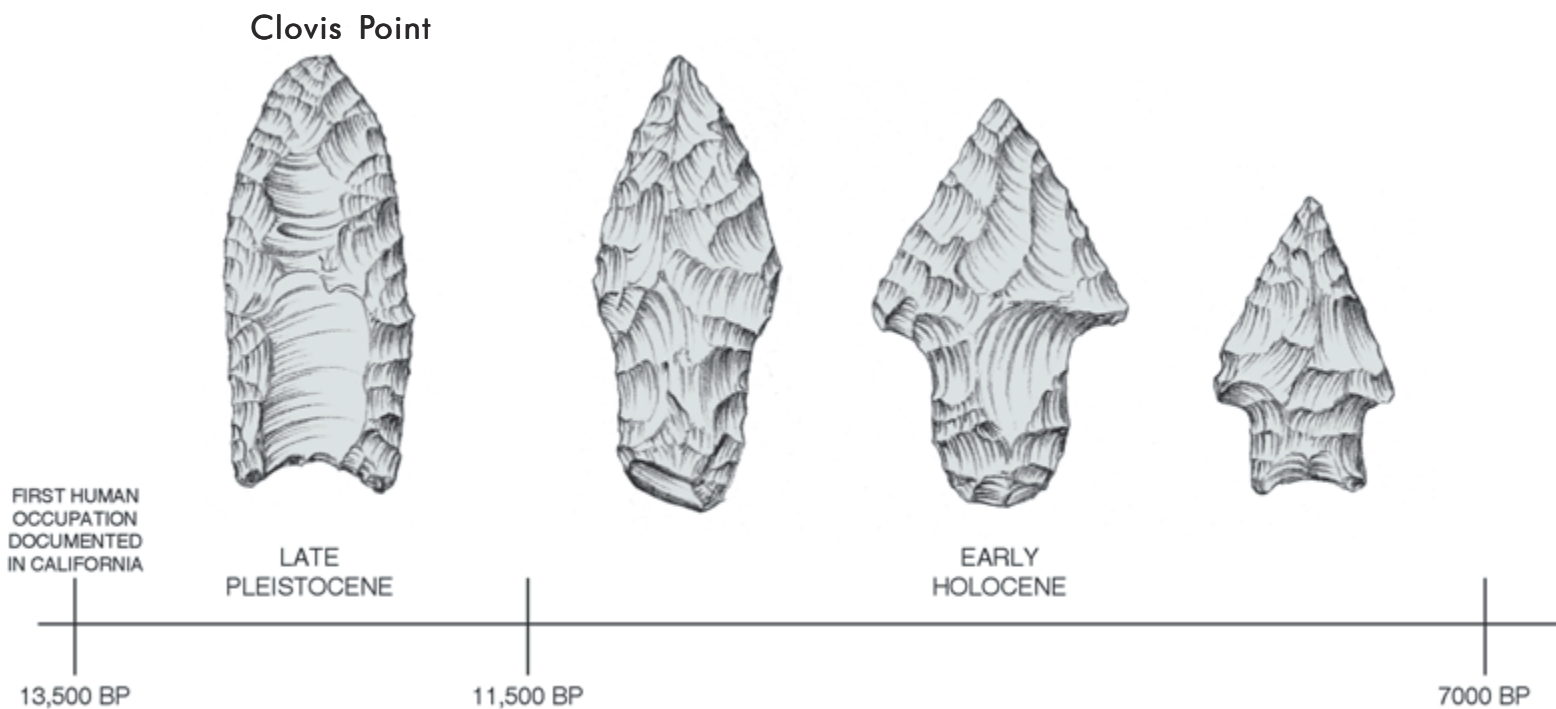


Artifact Styles

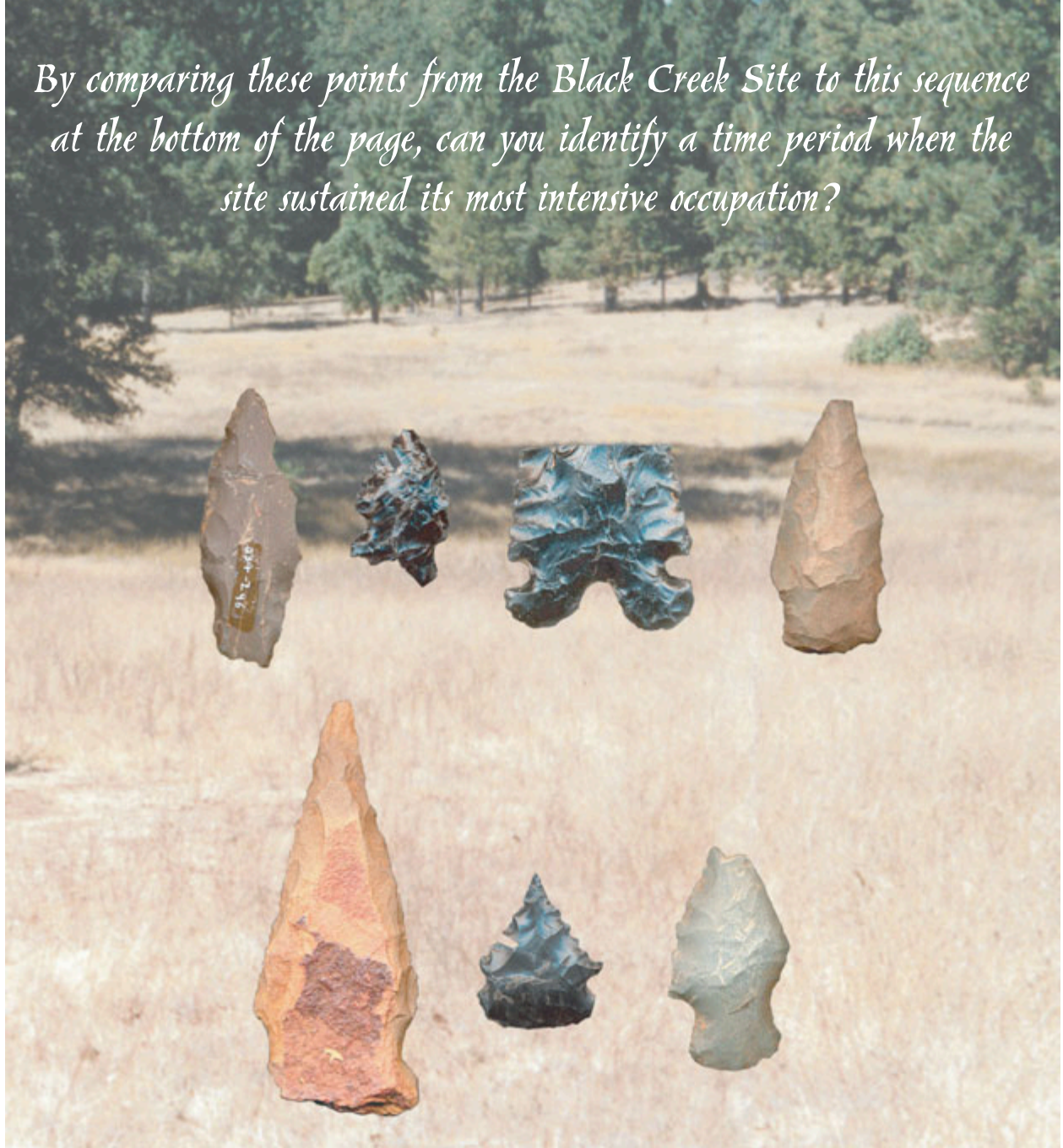
Archaeologists discovered long ago that artifact styles—the ways people make things—change over time. Certain artifacts therefore have their own distinct periods of manufacture and popularity. Examples that we are all familiar with run from beverage containers to automobiles. Artifacts that archaeologists have found particularly useful for this kind of dating include stone and shell beads, certain kinds of bone tools and ornaments and, in particular, dart and arrow points.

At prehistoric archaeological sites throughout the West, distinctive styles of points serve as useful markers of a particular time period. We have already discussed how Clovis points mark the earliest occupation of the Sierra Nevada foothills, but there are any number of distinctive point styles that were popular in subsequent periods. For example, large corner-notched points, used to tip darts and spears, were particularly popular after 7,000 years ago. By contrast, the most recently occupied archaeological sites in the foothills often contain small side-notched points that were attached to arrows.

A sequence of projectile point styles for the Foothill region, arranged by time period, is provided below. At the Black Creek Site, a variety of projectile point styles were recovered; however, most were a distinctive "corner-notched" type.



By comparing these points from the Black Creek Site to this sequence at the bottom of the page, can you identify a time period when the site sustained its most intensive occupation?



MIDDLE
HOLOCENE

LATE
HOLOCENE

3500 BP

160 BP



Nek'-na-ka'-tah the Rock Maiden

In the mountains among the rocks by the river lives Nek'-na-ka'-tah, the little rock girl. She is herself a rock and always lives in rocky places by the river. In some way she produces or gives off people; these people are hard like rocks and you can not cut them or shoot them with an arrow.

A long time ago Oo-soo'-ma-te the Grizzly Bear and Hoi-yah'-ko the FIRST PEOPLE, made the Chaw-se or mortar holes in the big flat-topped rocks. Then Nek'-na-ka'-tah the rock maiden came and helped make the Kah-wah'-che or stone pestles for the people to pound acorns with.

-A Tale of the Northern Me-wuk (Merriam 1993)

Learning from the Black Creek Site

Milling Tools and Plant Foods

The story of the rock maiden, Nek'-na-ka'-tah, shows the importance the Me-wuk attached to the acorn. The bedrock mortars and pestles used to grind acorn were gifts to the Me-wuk from Grizzly Bear and The First People. These things are found throughout the Sierra foothills.

But aside from the familiar bedrock mortar, the Black Creek Site and other prehistoric settlements located in this region often contain other kinds of milling gear, such as millingsstones and handstones, as well as large bowl mortars. Millingsstones are typically fashioned from thin slabs of granite, serpentine, or other stone materials. Their flat surfaces are used as platforms to grind nuts and seeds using a smaller, hand-held rock known as a handstone. Bowl mortars are often much more elaborate and are made from large, naturally rounded cobbles that have been slowly hollowed-out by repeated pounding using a stone pestle. Often, the exterior surfaces of these artifacts have been smoothed and shaped, forming a beautiful bowl-like mortar.



Archaeologists used to think that these different varieties of milling gear were used to grind different types of plant foods, such as small seeds (millingsstones and handstones), and larger nuts and acorns (bowl and bedrock mortars and pestles). More recent evidence—including the charred remains of acorns and grey pine nuts found at the Black Creek Site—suggests that all of these tools may have been used to process mostly acorns and other large nut crops.

Many archaeologists now believe that these differing varieties of milling gear were popular during different time periods, and that this popularity depended in large measure on how Native Peoples organized their villages and traveled across the landscape in search of food.

Bowl mortars appeared in archaeological sites about 5,000 years ago, when large villages in the Lower Foothills and Central Valley were first occupied. Because people lived in these villages most of the year, their milling tools were used much more frequently. This more sedentary lifestyle also allowed for higher levels of craftsmanship directed at these simple tools.



By contrast, millingstones and handstones were the preferred tools of more mobile peoples who moved frequently from camp to camp. The milling equipment was simply left behind at each camp to be used again upon return. Because such tools were used much less frequently, there was little investment in craftsmanship. Before people started living in large villages about 5,000 years ago, almost all seed-grinding tasks made use of millingstones and handstones. These two implements, however, never completely disappeared—there was always a need to mill acorns, nuts, and other important seeds whether living at a small camp or a large village.

The bedrock mortar was a late arrival in Me-wuk territory, first appearing only about 1,000 years ago. It was at this time that some of the larger villages were abandoned, and smaller family groups spent much more time living in seasonal camps located in the hinterlands. Bedrock outcrops occur in profusion throughout the Sierra foothills, often within or in close proximity to these seasonal camps. These rocky exposures provided a convenient working surface to pound and process acorns.



The Mystery of Greenstone

Some of the most common items recovered from archaeological sites throughout California are tools shaped from stone and the chipping debris that were a by-product of this tool making. In this region of the Sierra Nevada foothills, the oldest stone artifacts—those dating primarily from 11,000 to 5,000 years ago—are often fashioned from a flint-like, olive-green metamorphic rock that archaeologists and geologists refer to, not surprisingly, as greenstone.



Greenstone Quarry



Greenstone artifacts were found in the deepest and oldest strata of the Skyrocket Site, and were also recovered from the Black Creek Site, but until recently it has been somewhat of a mystery as to where Native Peoples quarried this material. This mystery was solved in 2004 when archaeologists discovered a greenstone quarry several miles east of Salt Springs Valley. The quarry consists of numerous bedrock outcrops of this sought-after material surrounded by an expansive scatter of waste flakes, broken tools, and hammerstones left by ancient tool makers.

At the quarry, tool makers would roughly shape nodules of greenstone, removing the outer, weathered surface by using a hammerstone made from a harder material, such as granite. The resulting product was usually a thin, leaf-shaped artifact which archaeologists refer to as a “biface.” In turn, bifaces would be transported back to camp or traded to more distant groups. Smaller, more finely made tools, such as projectile points and scrapers, were often made from large flakes removed from a biface.

Raw nodules of greenstone were also washed during floods down the creek and river channels that bisect the Sierra foothills. Native Peoples removed these materials from the gravel bars and bank deposits along these drainages, and fashioned them into bifaces and other tools.

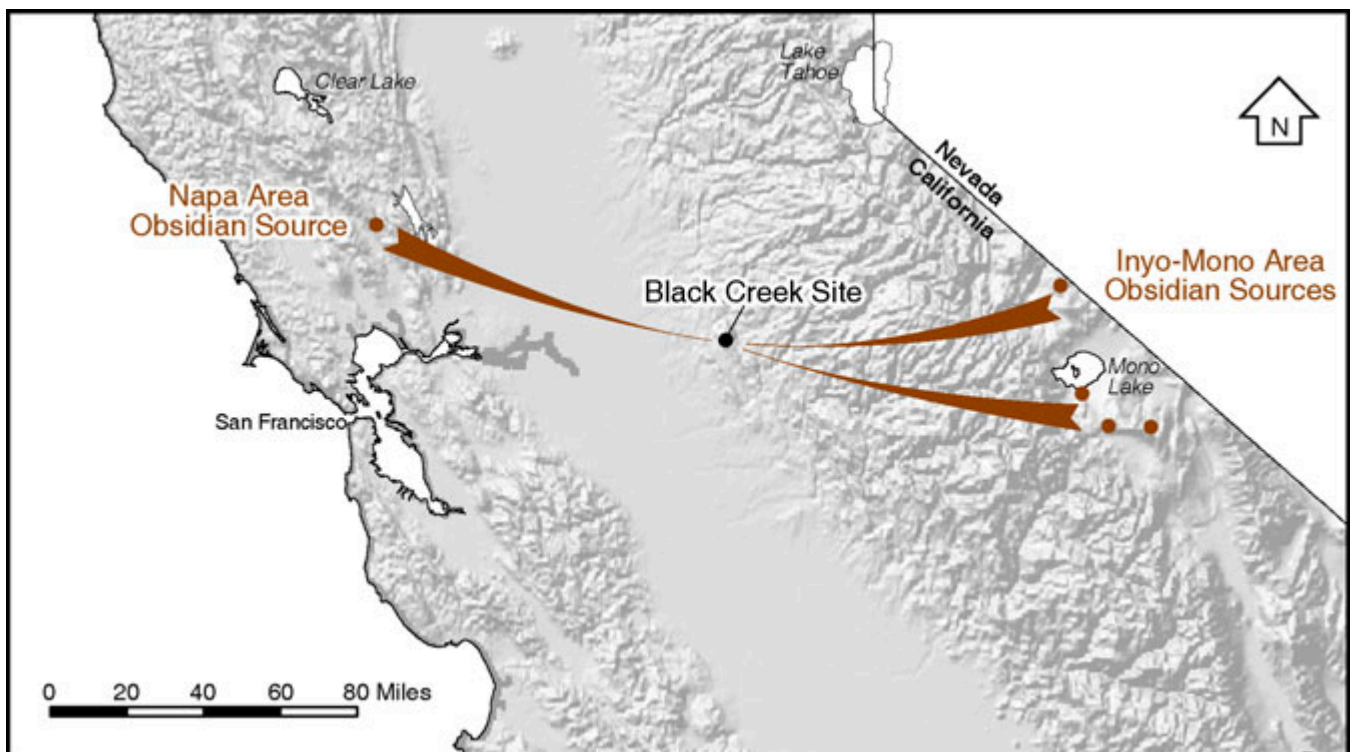
Obsidian: Unlocking the Movements of Ancient Peoples

Also common in archaeological sites of the Sierra foothills is obsidian. Obsidian is a volcanic glass that was favored by prehistoric toolmakers throughout California. It was used to fashion a variety of sharp-edged stone tools, including dart and arrow points, knives, and scrapers. Outcrops of obsidian occur in only a handful of locations in California, primarily the Modoc Plateau, the North Coast Ranges, and in the Inyo-Mono region east of the foothills.

Each geological source location has a unique chemical fingerprint. By analyzing the chemical signature for a particular artifact, archaeologists can determine from what source the obsidian was obtained. Archaeologists use this information to reconstruct ancient trade networks, interaction areas, and tribal territories.

At the Black Creek Site, five separate source locations are represented in the obsidian artifacts. Four are located in the Inyo-Mono region (Bodie Hills, Casa Diablo, Mono Craters, and Mt. Hicks), and one in the North Coast Ranges (Napa Valley).

By compiling obsidian source information from a number of sites located in the Central Valley and Sierra foothills, archaeologists have determined that there were certain periods when trade and interactions with tribes located in the Bay Area and North Coast Ranges were dominant. At other times, obsidian was obtained almost exclusively from the Inyo-Mono region. At the Black Creek Site, 98% of all obsidian artifacts were manufactured from obsidian from the Inyo-Mono region, predominantly from the Bodie Hills quarry located near Bridgeport.



Why Ah-ha'le [Coyote-man] Wanted to Steal the Sun for the Valley People

TO-TO'KAN-NO the Sandhill Crane was chief of the Valley People and Ah-ha'le, the Coyote-man lived with him. Their country was cold and dark and full of fog.

Coyote-man was discontented and traveled all about, trying to find a better place for the people. After a while he came to the Foothills Country where it began to be light. He went on a little farther and for the first time in his life saw trees, and found the country dry and warm, and good to look at. Soon he saw the Foothills People and found their village. He was himself a magician or witch doctor, so he turned into one of the Foothills People and mingled with them to see what they had and what they were doing. He saw that they had fire, which made light and became Wut'too the Sun. He saw also that there were both men and women, that the women pounded acorns and cooked acorn mush in baskets, and that everybody ate food. He ate with them and learned that food was good.

When his belly was full he went home and told the chief To-to'kan-no that he had found a good place where there were people who had the sun and moon and stars, and women, and things to eat. He then asked To-to'kan-no, "What are we going to do? Are we going to stay down here in the dark and never eat? The people up there have wives and children; the women make acorn soup and other things; the men have light and can see to hunt and kill deer. We live down here in the dark and have no women and nothing to eat. What are we going to do?"

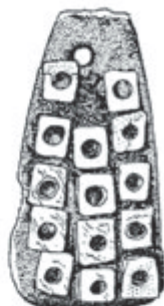
-A Tale of the Me-wuk (Merriam 1993)



Valley and Foothill People

As the story of why Coyote-man wanted to steal the sun makes clear, the Me-wuk recognize in their creation stories two separate worlds—the Valley Country and the Foothill Country—each with their own kinds of people.

Valley Artifacts



In many ways, these ancient stories converge with the prehistoric record of this region, especially during the time between 4,000 and 1,000 years ago. Archaeologists have long recognized that the artifacts and settlements, even the burials and cemeteries, of these two adjoining areas differ from one another. For many thousands of years, Valley People occupied large villages along the fringes of the Delta, some for centuries such that the sites eventually developed into large mounds. They used mortars and pestles, fashioned distinctive tools made of stone, bone, and antler, and hunted the marshes, sloughs, and river basins of the Central Valley.



At the very same time, the Foothill people appear to have built a very different lifeway around the gathering of three very important food crops: grey pine nuts, acorns, and manzanita berries. Rather than occupying large villages for much of the year, these ancient people traveled from camp to camp in search of this vegetal abundance. And unlike the Valley people, their tools of choice were the millingslab and handstone—these artifacts often litter foothill archaeological sites dating to this time.

Foothill Artifacts

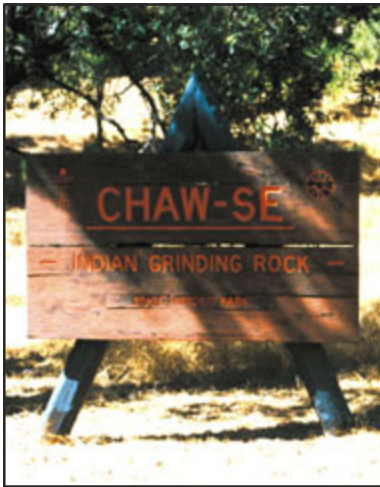


Some archaeologists believe that these distinctions between foothill and valley artifacts may actually reflect two different adaptations, and perhaps even cultures. Nor is this pattern limited to the territory surrounding the Me-wuk—similar differences in the archaeological records of the Foothills versus Valley occur throughout central California. It seems that the belt of oak, grey pine, and manzanita that rims the Central Valley provided a stable and productive habitat in which prehistoric peoples lived and flourished for millennia.

The Me-Wuk Today

The Me-wuk people, along with their culture and traditions, continue to flourish today. There are over 1,500 tribal members, many of whom live in small communities known as *rancherias*. The Tuolumne Band of the Me-wuk, located in Tuolumne County, is a federally recognized tribe with its own constitution and by-laws. Other Me-wuk groups are actively petitioning the federal government for tribal recognition.

Although full participants in today's society, the Me-wuk have never forgotten who they are; their culture and ancestry have been passed down from generation to generation. Through programs with Elders and Native-speakers, Me-Wuk traditions and Native



languages are being passed on to the younger generation. Me-wuk baskets, prized around the world for their design and craftsmanship, are still woven today using the time-honored techniques and materials of the past. Important gatherings and events continue to be held in the traditional roundhouse or *hangi*, including ceremonial dances that give thanks and respect for all that the Earth Mother has given to the Me-wuk. Chaw'se Indian Grinding Rock State Park in Pine Grove, with its roundhouse, is the gathering spot for one of the most important dances celebrated today. Each September Indian families gather to participate in a weekend of spiritual and traditional activities. This Big Time or *kote* is to celebrate the acorn, which figures prominently in Me-wuk diet, tradition, and history.

As guardians of their past, the Me-wuk care deeply about their history and want us all to honor and respect the ancient sites and encampments of their ancestors. Tribal monitors from both the Tuolumne and Calaveras bands of the Me-wuk participated in the development and implementation of the archaeological studies at the Black Creek Site.



While the annual Big Time at Chaw'se is not to entertain tourists, respectful visitors are welcome to watch the activities.



Laws that Preserve and Protect

Many State and Federal laws have been enacted to protect our nation's archaeological sites and the valuable information they contain.

- ~ Antiquities Act, 1906
- ~ Historic Sites Act, 1935
- ~ National Historic Preservation Act, 1966
- ~ National Environmental Policy Act, 1969
- ~ California Environmental Quality Act, 1970
- ~ Archaeological and Historic Preservation Act, 1974
- ~ American Indian Religious Freedom Act, 1978
- ~ Archaeological Resources Protection Act, 1979
- ~ Native American Graves Protection and Repatriation Act, 1990

Further Readings

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Layout and design of this brochure by Tammara Norton
and Heather Thompson.

It may come as a surprise to many people, but the California Department of Transportation (Caltrans) is one of the largest sponsors of archaeological research in California: they have been engaged in archaeological studies since the early 1960s, for almost 50 years. The ongoing requirements of building and maintaining our state highway system can result in serious impacts to archaeological sites and other cultural resources. As part of their environmental planning process, Caltrans takes into account these sensitive cultural resources by conducting scientific studies and by limiting the harmful effects of highway construction.

Archaeological excavations often provide our only means of understanding the distant past. As such, the results they reveal are just as much a part of our California heritage as our more familiar, recent history. Because of this, Caltrans mandates that the results of their archaeological programs be made available to the general public so that all Californians can share and celebrate in this common heritage. The archaeological investigation at the Black Creek Site described in these pages was sponsored by Caltrans as part of a highway re-alignment project along State Route 4 in Calaveras County. Caltrans archaeologist and contract manager, Alan Gold, developed and administered the contract facilitating the production of this brochure. This pamphlet summarizes the findings from the Black Creek Site, as well as the prehistory of the central Sierra Nevada Foothills.

Archaeological excavations at the Black Creek Site were conducted by Far Western Anthropological Research Group, Inc. (Far Western), and the Anthropological Studies Center, Sonoma State University at Sonoma. This pamphlet was written and produced by Far Western in coordination with the cultural resources staff at Caltrans District 10 (Stockton). Additional assistance was provided by the Tuolumne and Calaveras Bands of the Me-wuk Indians. This interpretive brochure is also accompanied by an online version of this material which can be found at the following website address: http://www.dot.ca.gov/dist6/environmental/docs/stealingthesun_brochure.pdf.

If you'd like more information on the Caltrans cultural resources management program in the central Sierra Nevada, or for individuals with sensory disabilities who would like this document in alternate formats, please contact:

Tina Walker, Public Information Officer
California Department of Transportation, District 10
Central Sierra Environmental Services Branch
PO Box 2048
Stockton, CA 95201
209-948-7977 or use the CA Relay Service TTY number 1-800-735-2929

